

# FGD4 Safe Area Gas Detector

## For Detection of Oxygen and Toxic Gases

- Compact and lightweight
- Plug-in replaceable gas sensors
- Wide power supply range of 8 to 24 volts dc
- Industry standard 4 to 20 mA output
- Optional weatherguard

### Description

The FGD4 series operates on 8–24 V DC with a 4–20 mA 2-wire output for connection to a control panel. The CO<sub>2</sub> version uses infrared sensing and requires an additional power connection (3-wire). Optional weather guards are available.

Calibration is simple via internal ZERO/SPAN buttons or with the plug-in handheld configuration unit.

### Specifications

<b>Material</b>	Bayblend (ABS and Polycarbonate blending)
<b>Cable entries</b>	1 x 20mm or ½" NPT
<b>Dimensions</b>	122 x 122 x 75 mm
<b>Weights</b>	FGD4 (excluding weatherguard) – 500grams Weatherguard – 225 grams
<b>Gas types</b>	Oxygen or toxic
<b>Input voltage</b>	8 to 24 volts dc
<b>Input power</b>	5 Watts maximum
<b>Internal fuse</b>	1 Amp antisurge 'Nanofuse'
<b>Analogue output</b>	4 to 20mA (10 bit resolution)
<b>Sensor Type</b>	Electrochemical or NDIR Infrared
<b>Measurement range</b>	Dependant upon sensor type
<b>Response time</b>	Sensor response times vary according to the sensor type
<b>Measurement resolution</b>	Dependent upon sensor type
<b>IP rating</b>	Enclosure IP66, Sensor IP65
<b>Operating temperature</b>	Varies with sensor type, typically - 20 to +50°C
<b>Recommended Storage temperature</b>	+10 to +20°C
<b>Humidity range</b>	Oxygen - 0 to 95% RH non-condensing Toxic - 15 to 90% RH non-condensing typically Infrared - 0 to 95% RH non-condensing
<b>Operating pressure</b>	Atmospheric + or - 10%



Standard gas types & sensor ranges available		
Gas Type	Sensor Tech	Ranges Available
Ammonia	Electrochemical	0-100ppm 0-1000ppm
Carbon Dioxide	Infrared	0-500ppm 0-1000ppm 0-2000ppm 0-5000ppm 0-10000ppm 0-2% 0-5% 0-100%
Carbon Monoxide	Electrochemical	0-50ppm 0-100ppm 0-500ppm
Chlorine	Electrochemical	0-20ppm
Carbon Monoxide	Electrochemical	0-1000ppm
Hydrogen Cyanide	Electrochemical	0-30ppm
Hydrogen Sulphide	Electrochemical	0-50ppm 0-100ppm 0-200ppm
Hydrogen	Electrochemical	0-1000ppm
Nitrogen Dioxide	Electrochemical	0-20ppm
Nitric Oxide	Electrochemical	0-100ppm
Oxygen	Electrochemical	0-21% 0-25%
Sulphur Dioxide	Electrochemical	0-20ppm
VOC	Electrochemical	0-20ppm

## Accessories

### Optional Configuration Unit

The FGD4 can be calibrated via a purpose designed keypad. The keypad allows the user to view the current gas level, calibrate the sensor with the ability to change the span level and calibrate the 4 to 20 mA loop.



### Weather Guard

An optional weather guard is available for installations exposed to the atmosphere or contaminants and reduces the possibility of water or other contaminants entering into the gas sensor thereby improving the overall reliability of the gas detector in harsh environments.



### Warning

These gas detectors must only be used in applications where there is no risk of potentially explosive gases being present or of them being created through industrial processes or other activities within the area concerned.